

A Retrieval Tool for Easy Access on Medline- and Pharmadatabases via WWW

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INTRODUCTION

This paper describes a retrieval tool for databases containing drug information and the MEDLINE literature database³. The main emphasis lies on usability which has been simplified a great deal by the use of cross-linking on knowledge access¹. The project has been realized as a network system via HTML, the language of the World Wide Web².

IMPLEMENTATION

Since there is not much manpower available for maintenance, the system has been devised as a zero administration system. A single central server provides information within the World Wide Web. To access the server, users need no more than a common web browser. The databases are implemented in the system via cgi scripts, written in PERL.

When searching for information, the user has a single field for input. He/she simply types in the relevant search words, navigated by cross-linking on knowledge access. An expert can restrict his search to different areas; he can choose search options as regular forms.

THE DRUG DATA RETRIEVAL SYSTEM

The system is based on the drug data list of the clinic. This is an internal list of all the drugs available at the hospital's pharmacy. More information about these and other drugs are provided by the 'Rote Liste', which is a German drug index edited by the 'Bundesverband der Pharmazeutischen Industrie e.V.' and the 'Scholz Arzneimittelinformationssystem', which is a commercial drug index edited by the 'Scholz Verlag'. This offer will be extended by including further specialised drug data information systems. The overall aim is to provide not only doctors, but the whole medical staff with information about the available drugs and additional information about possible alternative drugs, adverse drug reactions, dosage informations, possible interaction between several drugs, etc.. This includes also an

integrated access to a literature retrieval system, as described below, to allow an easy search for the newest publications about the drugs of interest within the same environment.

THE MEDLINE ACCESS

The system offers access to MEDLINE database via the database search server KnowledgeHost. In particular this program has a free-programmable interface via TCP/IP. The control language of this interface offers the same practicability as commercial client software. In addition, the system features access to articles from the department, which can contain treatment guidelines, vocational training courses, etc. The relevant database is built hierarchically as a tree structure. This is essential because a medical term may have completely different meanings in different fields. The tree structure is not mandatory; the author of a new article can decide whether he wants to connect it to an existing sheet or whether he needs a new branch.

CONCLUSION

Web-based access to medical information via an in-house Intranet within the WWW offers all the advantages of minimum administration, easy access to various services through a single user interface, and simplified usability via cross-linking of knowledge access.

We gratefully acknowledge the contribution of Aries Systems Co. (USA) and Fa. Nova Idea (Germany).

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